1. Package Contents

Thank you for purchasing PLANET Industrial Ethernet Switch, ISW-511/ISW-621 series. The descriptions of these models are shown below:

Model Name	Ports		Fiber Optical Interface	
	Copper	Optical	Mode	Distance
ISW-511	4 x 10/100BASE-TX	1 x 100BASE-FX	Multi-mode	2km
ISW-511T				
ISW-511S15			Single-mode	15km
ISW-511TS15				
ISW-621		2 x 100BASE-FX	Multi-mode	2km
ISW-621T				
ISW-621S15			Single-mode	15km
ISW-621TS15				
ISW-621TF			Multi/ Single Mode	Depending on SFP Module

In the following sections, the term **"Industrial Ethernet Switch"** means the above models.

Open the box of the Industrial Ethernet Switch and carefully unpack it. The box should contain the following items:

Industrial Ethernet Switch x 1 	User's Manual x 1 	SFP Dust Cap x 2 (ISW-621TF only) 
DIN-rail Bracket w/ Screws x 1 	Wall-mount Plate w/Screws x 1 set 	RJ45 Dust Cap x 4 

If any of these are missing or damaged, please contact your dealer immediately; if possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

2. Hardware Introduction

2.1 Switch Front Panel

The front panels of the Industrial Ethernet Switch series consist of Ethernet interfaces and LED indicators.

■ Front View

Figure 1: ISW-511 Series Front View

Figure 2: ISW-621 Series Front View

Figure 3: ISW-621TF Front View

2.2 LED Indicators

LED	Color	Function	
P1	Green	Lit: indicates power 1 has power.	
P2	Green	Lit: indicates power 2 has power.	
Fault	Green	Lit: indicates either power 1 or power 2 has no power.	
100	Green	Fiber Optic	Lit: indicates the fiber port is successfully connecting to the network at 100Mbps.
LNK/ACT	Green	Fiber Optic	Lit: indicates the link through that port is successfully established. Blinking: indicates that the Switch is actively sending or receiving data over that port.
		Copper	
10/100	Green	Copper	Lit: indicates the Switch is successfully connecting to the network at 100Mbps. Off: indicates that the Switch is successfully connecting to the network at 10Mbps.

2.3 Switch Upper Panel

The upper panel of the Industrial Ethernet Switch consists of one terminal block connector within two power inputs. Figure 4 shows the upper panel of the Industrial Ethernet Switch.

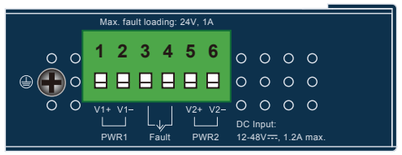
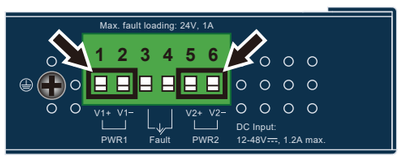


Figure 4: Industrial Ethernet Switch Upper Panel

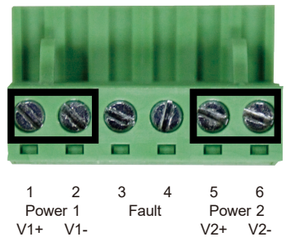
2.4 Wiring the Power Inputs

The 6-contact terminal block connector on the top panel of Industrial Ethernet Switch is used for two redundant power inputs. Please follow the steps below to insert the power wire.

1. Insert positive/negative DC power wires into contacts 1 and 2 for POWER 1, or 5 and 6 for POWER 2.



2. Tighten the wire-clamp screws for preventing the wires from loosening.

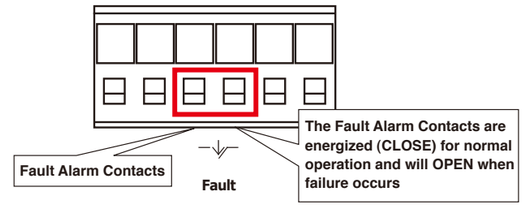


Note

The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

2.5 Wiring the Fault Alarm Contact

The fault alarm contacts are in the middle of the terminal block connector as the picture shows below. Inserting the wires, the Industrial Ethernet Switch will detect the fault status of the power failure, and then forms an open circuit. The following illustration shows an application example for wiring the fault alarm contacts.

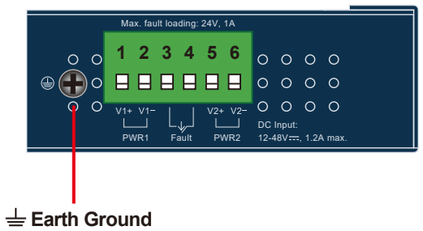


Note

1. The wire gauge for the terminal block should be in the range between 12 and 24 AWG.
2. Alarm relay circuit accepts up to 24V, max. 1A currents.

2.6 Grounding the Device

Users MUST complete grounding wired with the device; otherwise, a sudden lightning could cause fatal damage to the device.



Note

EMD (Lightning) DAMAGE IS NOT CONVERED UNDER WARRANTY.

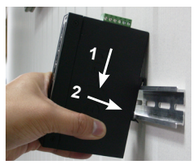
3. Installation

This section describes the functionalities of the Industrial Ethernet Switch's components and guides you to installing it on the DIN rail and wall. Please read this chapter completely before continuing.

Note

This following pictures show how to install the device. However, the device in the picture is not ISW-511 or ISW-621 series.

3.1 DIN-rail Mounting Installation



3.2 Wall-mount Plate Mounting

4. Product Specifications

Model		ISW-511 ISW-511T	ISW-511S15 ISW-511TS15
Hardware Specifications			
Copper	Ports	4 x 10/100BASE-TX, auto-negotiation, auto-MDI/MDI-X	
	Cable	10BASE-T: 2-pair UTP Cat. 3, 4, 5 cable (max. 100 meters) 100BASE-TX: 2-pair UTP Cat. 5, 5e, 6 cable (max. 100 meters)	
Fiber Optic	Port	1 x 100BASE-FX	
	Cable	50/125μm fiber 62.5/125μm fiber	9/125μm fiber
	Mode	multi-mode	single-mode
	Distance	2km	15km
Dimensions (W x D x H)		32 x 97 x 135 mm	
Weight		436g	
Power Requirements		12~48V DC, Redundant power with reverse polarity protection	
Power Consumption/ Dissipation		9.1 watts/31BTU	
Installation		DIN-rail kit and wall-mount ear	

Switch Specifications				
Switch Processing Scheme	Store-and-Forward			
Address Table	2K entries			
Buffer	1Mbit			
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex			
Switch Fabric	1Gbps			
Throughput (Packet Per Second)	0.74Mpps @ 64Bytes			
Standards Conformance				
Regulatory Compliance	FCC Part 15 Class A, CE			
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)			
Standards Compliance	IEEE 802.3 Ethernet,10BASE-T IEEE 802.3u Fast Ethernet, 100BASE-TX, 100BASE-FX IEEE 802.3x full-duplex flow control			
Standards Conformance				
Temperature	Operating: **-10~60 degrees C** **"T"** models Operating: **-40~75 degrees C** Storage: **-40~85 degrees C**			
Humidity	Operating: 5% to 90%, Storage: 5% to 90% (non-condensing)			

Model		ISW-621 ISW-621T	ISW-621S15 ISW-621TS15	ISW-621TF
Hardware Specifications				
Copper	Ports	4 x 10/100BASE-TX, auto-negotiation, auto-MDI/MDI-X		
	Cable	10BASE-T: 2-pair UTP Cat. 3, 4, 5 cable (max. 100 meters) 100BASE-TX: 2-pair UTP Cat. 5, 5e, 6 cable (max. 100 meters)		
Fiber Optic	Port	2 x 100BASE-FX		
	Cable	50/125μm fiber 62.5/125μm fiber	9/125μm fiber	Multi-Mode: 50/125μm fiber 62.5/125μm fiber Single-Mode: 9/125μm fiber
	Mode	multi-mode	single-mode	
	Distance	2km	15km	Depending on SFP Module
Dimensions (W x D x H)		32 x 87 x 135 mm		
Weight		442g		
Power Requirements		12~48V DC, Redundant power with reverse polarity protection		
Power Consumption/ Dissipation		11.6 watts/40BTU		16 watts/54BTU
Installation		DIN-rail kit and wall-mount ear		

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User's Manual

www.PLANET.com.tw

Industrial Fast Ethernet Switch with 4 10/100TX + 1/2 100FX Ports

ISW-511/ISW-621/ISW-511T/ISW-621T Series

PLANET Technology Corp.
10F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan

2350-AH0150-005

Switch Specifications	
Switch Processing Scheme	Store-and-Forward
Address Table	2K entries
Buffer	1Mbit
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
Switch Fabric	1.2Gbps
Throughput (Packet Per Second)	0.89Mpps@ 64Bytes
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 Ethernet, 10BASE-T IEEE 802.3u Fast Ethernet, 100BASE-TX, 100BASE-FX IEEE 802.3x full-duplex flow control
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)
Standards Conformance	
Temperature	Operating: **-10~60 degrees C** **"T"** models Operating: **-40~75 degrees C** Storage: **-40~85 degrees C**
Humidity	Operating: 5% to 90% Storage: 5% to 90% (non-condensing)

5. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource at PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQs:
http://www.planet.com.tw/en/support/faq

Switch support team mail address:
support@planet.com.tw